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EXAMINER	
ABDI, AMARA	
ART UNIT	**PAPER NUMBER**
2609	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/756,930	CHEN ET AL.	
	Examiner	Art Unit	
	Amara Abdi	2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 January 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

The discloser is objected to because of the following informalities:

The examiner suggests filing the correct application number; and the filing date instead of ----------, on page 1 in the specification if appropriate.

Appropriate correction is required

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

401 in figure 4 is not mentioned in the specifications.

2. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 3,7,11-15, and 18-24 are objected to because of the following informalities:

(1) Claim 3, line 3, "**extrema**" should be changed to "**extremes**", and the same informality in claim 14, line 3 and claim 17, line 3.

(2) Claim 7, line 4, "**a** start point" should be changed to "**the** start point", and "**an** end point" should be changed to "**the** end point"

(3) Claim 11, line 3, "**a** start point" should be changed to "**the** start point", and "**an** end point" should be changed to "**the** end point"

(4) Claim 12, line 2, "**a** stroke" should be changed to "**the** stroke"

(5) Claim 18, line 2, "**a** start point" should be changed to "**the** start point", and on line 3, "**an** end point" should be changed to "**the** end point"

(6) Claim 20, line 4, "**a** stroke" should be changed to "**the** stroke"

(7) Claim 21, line 9, the examiner suggest inserting "**first**" between "**the**" and "**stroke**", and same thing on line 11, between "**scaled**" and "**stroke**" for clarification

(8) Claim 23, line 2, " **a** second stroke" should be changed to "**the** second stroke"

Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 8-15 and 21-24 are rejected under U.S.C. 101 because the claimed invention is directed to non- statutory subject matter.

In each of the claims 8,9,10,11,12,13,14,15 and 21,22,23,24, a" program" which is executed by a computer is being recited; however, a program which is executed by a computer would reasonably be interpreted by one of ordinary skill in the art as software, pre se. This subject matter is not limited to that which falls within a statutory category of invention because it is limited to a process, machine, manufacture, or a composition of matter. Software is a function descriptive material and function descriptive material is non-statutory subject matter.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1,3, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Uchiyama (US 5,911,005).

(1) Regarding claim 1:

Uchiyama discloses a method for scaling a handwriting character input as shown in figure 6, the method comprising:

deriving a stroke parameter from a first handwritten character stroke; (column 4, line 29-30), (the examiner interpreted that the feature extraction unit (112 in figure 6)

extract the vector characteristic which represents the stroke parameter from the inputted image which is the first handwritten stroke)

calculating an input area in which the first handwritten character stroke was supplied; (column 1, line 22-23), (the examiner interpreted that the feature of each sub area as the size of each input area, as the feature was defined as a size on (column 5, line 1))

scaling the stroke parameter according to the input area (column 4, line 53-57), (the examiner interpreted that the sub area vector extraction unit (104 in figure 6) is setting the identification value of the vector characteristic which represents the stroke parameter based on the sub area specification parameters which represents the input area)

(2) Regarding claim 3:

Uchiyama discloses a method for scaling a handwriting character input where the input area bounds the first handwritten character stroke at coordinate extreme of the first handwritten character stroke (column 5, line 32-34), (the examiner interpreted that the identification value of the sub area (input area) is defined in both horizontal (x axis) and vertical (y axis), therefore it's limiting the first handwriting character stroke at its coordinates extreme X and Y, and the same think applies for the second stroke later)

(3) Regarding claim 6:

Uchiyama discloses a method for scaling a handwriting character input where the step of scaling includes multiplying the stroke parameter with the ratio of a reference area to the input area (column 5, line15-16), (the examiner interpreted the sub area as the input

area, and the area of the reference image as a reference area, also the examiner interpreted that the vector characteristic represents the stroke parameter, and the multiplication function would be recognized by anyone skilled in the art as mathematical function)

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 2,7, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchiyama in view of Ito et al. (US 6,694,056).

(1) Regarding claim 2:

Uchiyama discloses a method, system and program for scaling handwritten character input for performing handwriting recognition, and calculating the input area as above. (The examiner interpreted the recalculating method of the input area of the second stroke input is the same as the first stroke).

However, Uchiyama does not disclose the step of deriving which includes the detecting of the start point and an end point of the first handwritten character stroke as recited in claim 2.

However Ito et al. teaches a method where the step of deriving includes detecting a start point and an end point of the first handwritten character (column 4, line 12-16),

(The examiner interpreted that the off-stroke information-detecting unit has the same function as the detecting unit of claim 2)

One skilled in the art would have clearly recognized the detecting of the start point of the handwritten character to differentiate them from the end points (column 8, line 43-45). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system of Ito et al., where the start point and the end point of handwritten character are detected, in the system of Uchiyama for scaling handwritten character input because such feature is capable of distinguishing characters with similar stroke information and accurately recognizing characters using off-stroke between strokes (column 4, line 28-30)

(2). Regarding claim 7:

Uchiyama discloses a method for scaling handwritten character input for performing handwriting recognition where the step of calculating includes identifying coordinates extremes of the coordinates of the first and second handwritten character stroke (column 5, line 32-34)

However, Uchiyama does not disclose the determination of coordinates of start point and an end point of the first and the second handwritten characters as recited in claim 7

However, Ito et al. teaches a system where the coordinates (column 2, line 7), (the examiner interpreted the coordinates string as the sets of coordinates of points) of the start point (column 2, line 23) and an end point (column 2, line 24) of the first and second handwritten character stroke are determined (column 2, line 8-9), (the examiner

interpreted that each handwriting stroke composing the handwriting characters as the first and second handwriting character)

One skilled in the art would have clearly recognized the determination of the start and an end position of the handwritten character in order to obtain the stroke information (column 2, line 27-28). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system of Ito et al. in the system of Uchiyama because such feature will allowed to compare the obtained stroke information with each of set of standard stroke information and output a plurality of candidate, so the stroke candidate with low recognition level are ignored, which increases efficiency for the detecting of character candidate.

(3) Regarding claims 21-22:

Uchiyama discloses all the subject matter as in claims 2 and 7 above. (The examiner interpreted that the method of scaling the second stroke is the same as the rescaling of the first stroke, and the method of recalculating the input area is the same as the previous method for calculating the area).

However Uchiyama does not discloses the displaying of a collection area in a computer interface adapted to display a first stroke input into the collection area, also displaying the scaled stroke in window of the computer interface, where the window is a predefined area of the computer as recited in claims 21 and 22.

However, Ito et al. teaches a system and program where the rescaled first stroke and the scaled second stroke are displayed in the collection area, therefore in the window. (203 in figure 2), (column 12, line 6), (the examiner interpreted that the displaying

method is the same for the stroke parameters as well as the collection area, also the window system is inherent in the system of Ito et al. since he used a computer, and most computers in the world are running on window operating system)

One skilled in the art would have clearly recognized the display (column 12, line 6) of strokes in the collection area or window. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include the display system of Ito et al. in the scaling handwritten character of Uchiyama because such feature will display all the strokes parameters to the operator on the screen, so he could make any adjustment or changes to the program to improve the handwritten recognition.

10. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchiyama in view of Ilan et al. (US 6,023,529).

Uchiyama discloses a method, system and program for scaling handwritten character input for performing handwriting recognition and calculating the input area as in claims 1,2 and 3 above.

However, Uchiyama does not disclose:

1) The step of deriving which includes calculating the length parameter of the first handwritten character stroke as recited in claim 4, and

2) The step of calculating includes squaring the length parameter of the first handwritten character stroke as recited in claim 5,

However Ilan et al. teaches a method for calculating a length parameter (column 3, line 6-9) of the first handwritten character, and squaring the length parameter of the first

handwritten character (column 6, Formula (10)), (the examiner interpreted that squaring function of the length parameter between the centers of the first two strokes is the same as the squaring function of the length parameter between the start point and the end point of handwritten character)

One skilled in the art would have clearly recognized that the length parameter of handwritten stroke is important in recognition system (column 1, line 65-66), and (column 2, line 1-2) as well as the squaring of the length parameter, which is a mathematical function well known by one of ordinary skilled in art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system of Ilan et al. where the length parameter is determined as well as the squaring function of the length parameter, which is a mathematical function in the system of Uchiyama for scaling handwritten character input because such feature will improve the recognition system for some parameters which have a range of values, and are not binary in nature (column 2, line 3-6) as well as the usage of the length parameter in mathematical functions to determine another parameters such as the first parameter in horizontal axis and a second parameter in vertical axis (as shown in formulas (2) and (3), column 5).

11. Claims 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchiyama and Ito et al. (US 6,694,056) as applied in claims 2 and 7 above, and further in view of Ilan et al. (US 6,023,529)

(1) Regarding claim 8:

Uchiyama discloses a method and a program (column 4, line 22), (the examiner interpreted a word processors as a program) for scaling handwritten character input for performing handwriting recognition derived from the handwritten character stroke (column 4, line 29-30), also Uchiyama discloses a method and program for calculating an input area and scaling the stroke length parameter as above.

Ito et al. disclose a system (program) where the start point (column 2, line 23) and an end point (column 2, line 24) of the first and second handwritten character stroke are determined (column 2, line 8-9), (the examiner interpreted that each handwriting stroke composing the handwriting characters as the first and second handwriting character)

Uchiyama and Ito et al do not disclose the calculation of the stroke length parameter of the first stroke as recited in claim 8.

However, Ilan et al. teaches a method and a program for calculating a length parameter (column 3, line 6-9) of the first handwritten character

One skilled in the art would have clearly recognized that the length parameter of handwritten stroke is important in recognition system (column 1, line 65-66), and (column 2, line 1-2). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system of Ilan et al. where the length parameter is determined in the system of Uchiyama for scaling handwritten character input because such feature will improve the recognition system for some parameters which have a range of values, and are not binary in nature (column 2, line 3-6) as well as the usage of the length parameter in mathematical functions to determine another

parameters such as the first parameter in horizontal axis and a second parameter in vertical axis (as shown in formulas (2) and (3), column 5).

(2) Regarding claim 9:

Uchiyama further discloses a program for scaling a handwriting character input where the input area bounds the first handwritten character stroke at coordinate extreme of the first handwritten character stroke (column 5, line 32-34), (the examiner interpreted that the identification value of the sub area (input area) is defined in both horizontal (x axis) and vertical (y axis), therefore it's limiting the first handwriting character stroke at its coordinates extreme X and Y, and the same think apply for the second stroke, furthermore, the word processor was mentioned as part of recognition system (column 4, line 23). Therefore, the examiner interpreted the word processor as a program, since the program is included in the word processor system)

(3) Regarding claim 10:

Uchiyama further discloses the method and program where the second instruction scale the stroke length parameter of the first stroke as a ratio of the reference area to the input area (column 5, line15-16), (the examiner interpreted the sub area as the input area, and the area of the reference image as a reference area)

(4) Regarding claim 11:

Uchiyama and Ito et al. disclose a method, system and program for scaling handwritten character input for performing handwriting recognition, and calculating the input area as in claim 8 above.

(The examiner interpreted the recalculating method of the input area of the second stroke input is the same as the first stroke).

Uchiyama and Ito et al. do not disclose the determination of the start point and an end point for the second stroke input as recited in claims 11.

However Ito et al. teaches a method where the step of deriving includes detecting a start point and an end point of the first handwritten character (column 4, line 12-16),

(The examiner interpreted that the off-stroke information-detecting unit has the same function as the detecting unit of claim 2, and the method of determination the start point and an end point is the same for both first and second handwritten character)

One skilled in the art would have clearly recognized the detecting of the start point of the handwritten character to differentiate them from the end points (column 8, line 43-45). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system of Ito et al. where the start point and the end point of handwritten character are detected in the system of Uchiyama for scaling handwritten character input because such feature is capable of distinguishing characters with similar stroke information and accurately recognizing characters using off-stroke between strokes (column 4, line 28-30)

(5) Regarding claims 12 and 13:

Uchiyama and Ito et al. disclose a method, system and program for scaling handwritten character input for performing handwriting recognition and calculating the input area as in claims 8 and 11 above.

Uchiyama and Ito et al. do not disclose:

1) The step of deriving which includes calculating the length parameter of the second handwritten character stroke as recited in claim 12; and

2) rescaling the stroke length parameter of the second stroke as recited in claims 13.

However Ilan et al. teaches a method for calculating a length parameter (column 3, line 6-9) of the second handwritten character, (the examiner interpreted that the method for calculating the first handwritten character is the same as the second stroke), and rescaling the stroke parameter of the second stroke (column 6, Formula (10)), (the examiner interpreted that the scaling method of the first handwritten character as the same as the rescaling of the second stroke)

One skilled in the art would have clearly recognized that the length parameter of handwritten stroke is important in recognition system (column 1, line 65-66), and (column 2, line 1-2) as well as the rescaling method of the second stroke which the same as the scaling method of the first stroke parameter. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system of Ilan et al. where the length parameter is determined in the system of Uchiyama for scaling handwritten character input because such feature will improve the recognition system for some parameters which have a range of values, and are not binary in nature (column 2, line 3-6) as well as the usage of the length parameter in mathematical functions to determine another parameters such as the first parameter in horizontal axis and a second parameter in vertical axis (as shown in formulas (2) and (3), column 5).

(6) Regarding claim 14:

Uchiyama further discloses a system and program where the recalculated input area bounds the first stroke and the second stroke at coordinates extremes on the first stroke and the second stroke (column 5, line 32-34), (the examiner interpreted that the recalculated input area is limiting the first and the second handwriting character strokes at its coordinates extreme X and Y, also the examiner interpreted the word processor as a program)

(7) Regarding claim 15:

Uchiyama further discloses a system and program where the second instructions rescale the stroke length parameter of the first stroke according to the recalculated input area (column 5, line15-16), (the examiner interpreted that the method of rescaling the first handwritten character is the same as above, except the using of the new value of recalculated input area in the rescaling).

12. Claims 16-20 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchiyama and Ilan et al. (US 6,023,529) as applied in claims 1,4 and 6 above, and further in view of Ito et al. (US 6,694,056)

(1) Regarding claim 16:

Uchiyama discloses a system and method (column1, line 6) for calculating an input area into which the first handwritten character stroke was supplied (column 1, line 22-23), where the calculated stroke parameter is scales according to the calculated input area (column 5, line15-16)

Ilan et al. disclose the calculating of the stroke length parameter from the start point and the end point (column 3, line 6-9)

Uchiyama and Ilan et al. do not discloses a system comprising:

a pointing device for receiving a first handwriting character stroke; a memory that contains a set of instructions; and a processing unit, responsive to execution of the set of instructions as recited in claim 16;

However, Ito et al. teaches a system (figure 1 and 2) comprising:

A pointing device for receiving a first handwritten character stroke (204 in figure 2), (column 12, line 13); a memory that contains a set of instructions (column 12, line 7), (the examiner interpreted the memory as the storage medium); and a processor unit (109 in figure 1, column 11, line 64) and (column 12, line 4) responsive to execution of the set of instructions, for determining a start point and an end point of the first handwritten character (column 19, line 47-48)

One skilled in the art would have clearly recognized the data system, which comprises the pointing device (column 12, line 13), memory (column 12, line 7) and a processing unit (column 12, line 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system of Ito et al. which comprises a pointing device, memory and a processor unit in the system of Uchiyama for scaling handwritten character because in such feature, it will be possible to have a computer readable storage medium stores programs code that have the computer to execute the function of each, and applies to the handwritten character inputted by the pointing device such as a pen without functions for recognizing the handwritten characters

drawn one after another, as well as it will be possible to make the demonstration of the invention in a computer.(column 26, line 61-67).

(2) Regarding claim 17:

Uchiyama further discloses a system where the calculated input area bounds the first handwritten character stroke at coordinate extremes of the first handwritten character stroke (column 5, line 32-34).

(3) Regarding claim 18:

Uchiyama and Ilan et al. discloses a method, system and program for scaling handwritten character input for performing handwriting recognition, and calculating the input area as in claims 16 and 17 above.

(The examiner interpreted the recalculating method of the input area of the second stroke input is the same as the first stroke).

Uchiyama and Ilan et al. do not disclose a processing system where the processing unit, determines the start point and the end point of the second handwritten character as recited in claim 18.

However Ito et al. teaches a method where the processing system determines a start point and an end point of the second handwritten character (column 4, line 12-16),

(The examiner interpreted that the method of determination the start point and an end point is the same for both first and second handwritten character)

One skilled in the art would have clearly recognized the calculation by the processing unit of the start point of the handwritten character to differentiate them from the end points (column 8, line 43-45). Therefore it would have been obvious to one of ordinary

skill in the art at the time of the invention to combine the system of Ito et al. where the start point and the end point of handwritten character are detected in the system of Uchiyama for scaling handwritten character input because such feature is capable of distinguishing characters with similar stroke information and accurately recognizing characters using off-stroke between strokes (column 4, line 28-30)

(4) Regarding claim 19:

Uchiyama discloses a method, system and program for scaling handwritten character input for performing handwriting recognition and calculating the input area as in claims 16 and 18 above.

(The examiner interpreted that the method of recalculating the input area is the same as above).

However, Uchiyama does not disclose the processing system for rescaling the stroke length parameter as recited in claims 19.

However Ilan et al. teaches a method for rescaling the stroke parameter (column 3, line 6-9), (the examiner interpreted that the rescaling method of the stroke parameter is the same as the scaling method above)

One skilled in the art would have clearly recognized that the rescaling of the stroke length parameter (column 2, line 1-2). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system of Ilan et al. where the length parameter is determined as well as the squaring function of the length parameter, which is a mathematical function in the system of Uchiyama for scaling handwritten character input because such feature will improve the recognition system

for some parameters which have a range of values, and are not binary in nature (column 2, line 3-6) as well as the usage of the length parameter in mathematical functions to determine another parameters such as the first parameter in horizontal axis and a second parameter in vertical axis (as shown in formulas (2) and (3), column 5).

(5) Regarding claim 20:

Uchiyama discloses a system and method (column1, line 6) to scale the stroke length parameter of the second handwritten character in relation to the recalculated input area as in claims 16 and 18 above. (The examiner interpreted that the scaling method is the same for the first and the second handwritten character).

Ilan et al. disclose the calculating of the stroke length parameter of the second handwritten character (column 3, line 6-9), (the examiner interpreted that the method of calculating the stroke length parameter is the same for the first and the second handwritten character)

Uchiyama and Ilan et al. do not disclose a system where the processing unit, responsive to determining the start point and the end point of the second handwritten character as recited in claim 20.

However Ito et al. teaches a system where the processing unit determines the start point and an end point of the second handwritten character (column 4, line 12-16),

(The examiner interpreted that the method of determination the start point and an end point is the same for both first and second handwritten character)

One skilled in the art would have clearly recognized the detecting of the start point of the second handwritten character to differentiate them from the end point (column 8,

line 43-45). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system of Ito et al. where the start point and the end point of handwritten character are detected in the system of Uchiyama for scaling handwritten character input because such feature is capable of distinguishing characters with similar stroke information and accurately recognizing characters using off-stroke between strokes (column 4, line 28-30)

(6) Regarding claims 23 and 24:

Uchiyama and Ilan et al. discloses all the subject matter as in claims 16,18 and 20 above. (The examiner interpreted that the method of scaling the second stroke is the same as the rescaling of the first stroke, and the method of recalculating the input area is the same as the previous method for calculating the area).

Uchiyama and Ilan et al. do not discloses a computer program where the first instructions display the second stroke input in the collection area as recited in claim 23, and the third instructions where the rescaled first stroke and scaled second stroke were displayed in the window as recited in claim 24.

However, Ito et al. teaches a system and program where the rescaled first stroke and the scaled second stroke are displayed in the collection area, therefore in the window. (203 in figure 2, column 12, line 6), (the examiner interpreted that the displaying method is the same for the stroke parameters as well as the collection area, also the window system is inherent in the system of Ito et al. since he used a computer, and most of computers in the world are running on window operating system)

One skilled in the art would have clearly recognized the display (column 12, line 6) of strokes in the collection area or window. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include the display system of Ito et al. in the scaling handwritten character of Uchiyama because such feature will display all the strokes parameters to the operator on the screen, so he could make any adjustment or changes to the program to improve the handwritten recognition, also the operator may use the colors to distinguish between the handwritten characters on the screen.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Suwa et al. (US 6,535,619) disclose an address recognition apparatus for reading an address from the handwritten characters in free-pitch area.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amara Abdi whose telephone number is (571) 270-1670. The examiner can normally be reached on Monday through Friday 7:30 Am to 5:00 PM E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shuwang Liu can be reached on (571) 272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Amara Abdi
01/18/2007

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